

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-019482**Date Inspected:** 21-Jan-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Liu Hua Jie**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG COMPONENT**Summary of Items Observed:**

On this day Caltrans OSM Quality Assurance (QA) Inspector Subhasis Bera was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhen Hua Port Machinery Company (ZPMC) at Chang Xing Island in Shanghai, China. QA Inspector observed and/or found the following:

In process Inspection

Trial Assembly

This QA Inspector observed the following work in progress:

SMAW in the 3G position for the OBG Segment 12BW to 12CW weld No.SP3053-001-032. The welder is identified as #046709. ZPMC QC is identified as Mr.Shi Lei. The welding variables recorded by QC appear to comply with WPS-B-P-2213-B-U2-FCM-1.

SMAW in the 3G position for the OBG Segment 12BW to 12CW weld No.SP3050-001-038. The welder is identified as #046704. ZPMC QC is identified as Mr.Shi Lei. The welding variables recorded by QC appear to comply with WPS-B-P-2213-B-U2-FCM-1.

SMAW in the 3G position for the OBG Segment 12BW to 12CW weld No.SP3038-001-031. The welder is identified as #046709. ZPMC QC is identified as Mr.Shi Lei. The welding variables recorded by QC appear to comply with WPS-B-P-2213-B-U2-FCM-1.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

FCAW in the 2F position for the OBG Segment 12BW weld No.SP3039-001-029/030. The welder is identified as #053486. ZPMC QC is identified as Mr. Shi Lei. The welding variables recorded by QC appear to comply with WPS-B-T-2132..

SMAW in the 4G position for the OBG Segment 12CW weld No.SEG3006A-011. The welder is identified as #040611. ZPMC QC is identified as Mr. Zhou Peng. The welding variables recorded by QC appear to comply with WPS-B-P-2214-B-U2FCM-1.

During random in-process visual inspection of welds located on Orthotropic Box Girder (OBG) segment 12BW and 12CW, this Quality Assurance Inspector (QA) discovered the following issues that ZPMC personnel performed Shielded Metal Arc Welding (SMAW) on the inside of deck plate splice joining Segments 12BW to 12CW while standing water was on the top/outside of deck plate. The weld is identified as OBW12A-001. The Weld is Complete Joint Penetration (CJP) butt joint. The Weld is non Seismic Performance Critical Members (non SPCM). The Y distance for the exposed area was 13150 mm to 13620mm as measured from counter weight side, edge plate along the deck plate splice. The segments are located at trial assembly area.

This QA generated an incident report on this date.

CWR verifications (CWR2762)

Type – Base Metal Repair

This QA Inspector was notified via email for verification of B–CWR2762 at 1400 hours the following was observed:

- The component for verification was identified as FL3 @ PP110 of segment 12AW
- Base metal repair was to be performed on location where temporary attachment removed area
- ZPMC QC Li Yang was present on site to direct and record all repair work.
- WPS to be used for repair were WPS-345-SMAW-2G(2F)-FCM-Repair-1 and WPS-345-SMAW-3G(3F)-FCM-Repair-1

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



WELDING INSPECTION REPORT

(Continued Page 3 of 3)



Summary of Conversations:

No relevant conversations

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Bera,Subhasis	Quality Assurance Inspector
Reviewed By:	Dsouza,Christopher	QA Reviewer
